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Case Management

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Case Management: Management of Suspect/Active TB Patients

POLICY: The public health department is responsible for ensuring that adequate, appropriate diagnostic and treatment services are available, and for monitoring the results of therapy. Suspect/active TB patients may be managed in the private sector, by the public health department or jointly.

PURPOSE: To obtain appropriate treatment for the TB client and to minimize the spread of TB within the community.


PROCEDURE: Upon notification of a suspect/active TB patient the public health nurse should follow the steps identified below. **Please notify your state TB nurse at 866-628-9891 initially and at any point in the process when you need assistance or have a question.**

1. Upon notification of a patient with any of the following:

- AFB (acid-fast bacillus) positive i.e. smear positive
- Abnormal CXR consistent with TB
- Physician suspicion of TB
- Positive skin test – all patients with positive skin tests should be evaluated for TB disease before initiating treatment for LTBI. (Once disease is ruled out see section for treatment of LTBI.)
 1. Evaluate the patient for signs/symptoms of TB disease. See: Tuberculosis Signs & Symptoms for active disease checklist.
 2. Ensure a CXR is ordered as soon as possible
 - Diagnostic services can be utilized for physician's visit and CXR if patient has no insurance or means to obtain care.
 3. Obtain a sputum sample if patient has a productive cough.
 - A physician's order is not needed to obtain a non-invasive sputum specimen. The specimen can be sent to the state TB lab by the local health department at no charge to the patient and/or the local health department.

2. The public health nurse should:

- A. Complete patient interview within 3 days of notification of suspect TB
 - It is highly recommended to schedule at least one home visit during interview process. Follow up interview is beneficial.
- B. Initiate airborne isolation precautions, if pulmonary TB is suspected.
 - If the initial lab specimen is from an extrapulmonary site, obtain 3 sputum specimens to check for potential pulmonary involvement.
 - If TB is confined to only extra-pulmonary site, the patient is not considered contagious
- C. Obtain a doctor's order for antituberculosis medications.

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- Ensure that an appropriate regimen is ordered. See the ATS/CDC/IDSA Tuberculosis Treatment Guidelines
- Fax to contract pharmacy.
- TB medication is provided at no charge by the state to ALL patients.

Note: If client has insurance please include that information on the pharmacy form and the contract pharmacy can bill the company. The patient WILL NOT receive a bill or be penalized by their insurer in any way.

- D. Discuss Directly Observed Therapy (DOT) with both the physician and the patient. See section 4.6. DOT coupled with individualized case management leads to the best treatment results.
- E. Assess the patient for risk factors for hepatotoxicity
 - Arrange for liver function tests as ordered by the physician or as appropriate
- F. Complete CD-1 form and TB History (TBC-10) - fax to state TB nurse.
- G. Contact/source case investigation should be initiated.
 - See CDC Module # 6 on “Contact Investigation for Tuberculosis”.
 - <http://www.phppo.cdc.gov/PHTN/tbmodules/modules6-9/m6/6-index.htm>
- H. Collect sputum specimens weekly until client has **3 consecutive negative sputum smears**
 - Airborne isolation may be discontinued after 3 consecutive negative sputum smears.
- I. Sputum specimens should continue to be collected on a weekly basis until the patient has **3 consecutive negative cultures**.

Note: If the client is culture positive after two months of therapy the health care provider should be notified. If the client has also shown cavitations on initial CXR the length of treatment should be extended to 9 months per CDC/ATS recommendations

- J. The CDC Treatment Guidelines **do not** recommend: collection of sputum specimens or CXR at completion of therapy. A health care provider may choose to do so in order to assess effectiveness of therapy.


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Tuberculosis Signs & Symptoms Checklist

Client Name: _____ Date: _____

- | | | |
|---|-----|----|
| 1. Have you ever had a positive TB skin test? | Yes | No |
| If yes, have you received treatment? | Yes | No |
| When _____ | | |
| | | |
| 2. Do you smoke? | Yes | No |
| 3. Do you have a cough? | Yes | No |
| 4. Do you cough up anything? | Yes | No |
| 5. Do you cough up blood? | Yes | No |
| 6. Have you lost weight? | Yes | No |
| 7. Has your appetite decreased? | Yes | No |
| 8. Do you have fever or chills? | Yes | No |
| 9. Do you have night sweats? | Yes | No |
| 10. Do you feel unusually tired or weak? | Yes | No |
| 11. Do you have chest pains? | Yes | No |
| 12. Have you been in close contact with someone who has TB? | Yes | No |
| 13. Have you taken prednisone or steroids recently? | Yes | No |
| 14. Have you recently been treated for cancer? | Yes | No |
| 15. Have you ever been diagnosed with hepatitis or liver disease? | Yes | No |
| 16. Do you drink alcohol? | Yes | No |
| 17. What is your current method of birth control? _____ | | |
| 18. Are you pregnant? _____ Date of LMP: _____ | | |
| 19. How long have you lived in the United States? _____ | | |

Comments: _____

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HOJA DE ENTREVISTA DE TUBERCULOSIS

Nombre: _____

Fecha: _____

- | | | |
|--|-------|------------------------------------|
| 1. Usted ha tenido siempre una prueba positiva de la tuberculosis? | SI | NO |
| Si si, usted ha recibido el tratamiento? | SI | NO |
| Cuando? _____ | | |
| | | |
| 2. Usted fuma? | SI | NO |
| | | |
| 3. Tiene usted tos? | SI | NO |
| | | |
| 4. Usted tose cualquier cosa? | SI | NO |
| | | |
| 5. Usted tose sangre? | SI | NO |
| | | |
| 6. Ha perdido peso? | SI | NO |
| | | |
| 7. El appetite ha disminuido? | SI | NO |
| | | |
| 8. Tiene fibre o escalofrios? | SI | NO |
| | | |
| 9. Usted suda en la noche? | SI | NO |
| | | |
| 10. Tiene dolor en el pecho? | SI | NO |
| | | |
| 11. Usted se siente inusualmente cansado o debil? | SI | NO |
| | | |
| 12. Usted ha estado en contacto cercano con alguien que tien tuberculosis? | SI | NO |
| | | |
| 13. Usted ha tomado el prednisone o los esteroides recientemente? | SI | NO |
| | | |
| 14. Ha tenido algun tratmiento para el cancer recientemente? | SI | NO |
| | | |
| 15. Le siempre han diagnosticado con hepatitis o enfennedad del higado? | SI | NO |
| | | |
| 16. Usted bebe el alcohol? | SI | NO |
| | | |
| 17. Se usa anticonseptivos? | | |
| Cual tipo? Patillas _____ Inyeccion _____ Condoms _____ | | |
| | | |
| 18. Esta embarazada? | SI NO | La fechna de la utima regla: _____ |
| | | |
| 19. Cuanto tiempo lleva en los Estados Unidos? | _____ | |

COMENTARIOS: _____

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NURSING CARE PLAN

NAME: _____

DOB: _____


Date	NURSING DIAGNOSIS	INTERVENTION	OUTCOMES
	Altered health maintenance related to insufficient knowledge of disease process.	1. Assess patient's current understanding of active tuberculosis	Patient will verbalize understanding of education provided.
		2. Provide verbal education to patient and supply with written information regarding tuberculosis. Instruction should be at educational level appropriate for patient. Translation of information will be made available, if needed.	Patient will be compliant with treatment and specimen collection.
		3. Provide education regarding treatment of tuberculosis including basic medication information. Education will be made available in client's primary language.	Patient will verbalize understanding of TB treatment and medications.
		4. Provide instruction on sputum collection and rationale for collection.	
		5. Provide instructions and rationale for isolation precautions.	

Altered nutrition: less than body requirements related to anorexia secondary to disease process.	1. Assess dietary habits and needs.	Patient will verbalize understanding of education provided.
	2. Assess ability to obtain food and prepare meals.	Patient will have improved appetite.

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NURSING DIAGNOSIS	INTERVENTION	OUTCOMES
	3. Provide basic nutritional education to patient.	Patient will have adequate nutritional intake.
	4. Encourage small meals and nutritional supplements if needed.	
Alteration in comfort related to nausea and/or vomiting.	1. Assess for signs of dehydration.	Patient will verbalize understanding of education provided.
	2. Assess onset, duration of nausea and/or vomiting.	Patient will have a decrease in symptoms.
	3. Encourage small, frequent meals.	
	4. Educate regarding antiemetics.	

Social isolation related to disease process (contagiousness).	1. Assess patient's emotional status and coping ability.	Patient will verbalize understanding of education provided.
	2. Encourage phone conversations or letter-writing to maintain contact with others.	Patient will verbalize decrease in feelings of loneliness and isolation.
	3. Instruct patient in proper use of mask.	
	4. Provide education to patient about criteria for release from isolation precautions.	

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Check list for Active Disease Case

INITIAL WORKUP:


	YES	NO	NA	Notes
CD-1 completed				
Conduct patient interview				
Complete TB History (TBC-10) Form				
CD-1&TB History Form faxed/ mailed to state TB nurse				
Release of information signed				
Contact/source case investigation initiated				
Patient education provided in client's primary language and documented, Isolation procedures as needed				
Admission note completed				
Sputums sent to MRC for culture & sensitivity				
Diagnostic services arranged, if needed				
HIV testing offered				
Baseline LFT and eye exam, if applicable				
Prescriptions obtained and faxed to state contract pharmacy				
DOT initiated				
Contact form mailed to district office (TBC-13)				

DURING TREATMENT:

	MONTH 1	MONTH 2	MONTH 3	MONTH 4	MONTH 5	MONTH 6
Assess & document on TBC-1						
LFT, if indicated						
DOT (# of doses this month)						
Sputums submitted						
TBC-1 sent to state TB nurse						

COMPLETION OF TREATMENT:

	YES	NO	Notes
Completion of therapy documented (including # of doses received)			
Completion letter to client			
State TB Nurse notified			

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Case Management: Obtaining TB Medications

POLICY: To provide medications for the treatment of TB disease and LTBI. Medications are provided at no charge to residents of Missouri. **There are no financial eligibility requirements.**

PURPOSE: To eliminate all barriers in providing TB medications. To facilitate nursing case management of TB patients through the LPHA.

PROCEDURE:

1. The local public health nurse should complete the Tuberculosis Medication Request Form, TBC-8, (see appendix) and FAX along with the prescriptions for TB medications to the state contract pharmacy. Mail the original prescription to the pharmacy. A copy should be retained in the patient record.
2. The prescription may be written for the entire expected course of treatment. The pharmacy will dispense only ONE MONTH at a time.
3. Check the Five “R’s” of medication before dispensing; Right medication, right dose, right patient, right route, and right time.
4. The medication is only to be dispensed to the patient and/or legal guardian. When dispensing TB medications assess the patient for risk factors of hepatotoxicity.
5. When dispensing to another health care provider to provide DOT, i.e. nursing home, student health center and etc. the receiving nurse signs and accepts responsibility for the TB medications.
6. The TB medications should be recorded on the tuberculosis drug monitoring record, TBC-1. (See appendix) All medications should be documented on the TBC-1.
7. Fax the TBC-1 to the State TB nurse each month.
8. For patients choosing to obtain their TB medications from an alternate source, ensure that the patient and/or physician understands the benefit of receiving the medications from the state pharmacy at no charge to the patient.
9. Nursing case management is available through the local public health nurse regardless of where the client obtains his/her medications.
10. If the patient and/or physician decline the use of the state pharmacy, the patient is still the responsibility of the LPHA. **The local public health nurse should contact the patient and/or their physician at least monthly to monitor their progress.**



MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES
TB MEDICATION REQUEST

☐ NEW ☐ REFILL

FOR NEW ORDERS CALL 800-392-5586 OR FAX 660-584-5589
PLEASE MAIL OR FAX REFILL REQUESTS

HEALTH UNIT			
CLIENT INFORMATION			
NAME		DATE OF BIRTH	WEIGHT
ADDRESS (STREET, CITY, ZIP CODE)		SOCIAL SECURITY #	
PRESCRIPTION INSURANCE INFORMATION (ATTACH COPY OF CARD AT BOTTOM OF PAGE IF AVAILABLE)			
INSURANCE PLAN (ie: MEDICAID, BLUE CHOICE, PCS, UNITED HEALTHCARE)		CLIENT'S RELATIONSHIP TO CARDHOLDER (ie: SELF, SPOUSE, DEPENDENT)	
CARDHOLDER ID #	GROUP #	CLIENT'S ID # (IF DIFFERENT THAN CARDHOLDER)	
PHYSICIAN INFORMATION			
NAME		TELEPHONE #	
ADDRESS (STREET, CITY, STATE, ZIP CODE)			
ADDITIONAL MEDICATIONS BEING TAKEN		DRUG ALLERGIES	
TOTAL DURATION OF THERAPY _____ MONTHS			
MEDICATION ORDER			
ITEM	RX NUMBER	ITEM	RX NUMBER
PERSON COMPLETING FORM			
NAME		TELEPHONE #	
ATTACH COPIES OF PRESCRIPTION IF AVAILABLE			

FAX FORM TO: 660-584-5589
OR MAIL TO: PREFERRED PHARMACY SERVICES
810 W. 35TH ST., STE 102
HIGGINSVILLE, MO 64037

PLEASE PLACE COPY OF INSURANCE CARD HERE



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Tuberculosis Medication Record

Name: _____ Start Date ____/____/____ Current Month: _____ Allergies: _____

Meds/Dose/Freq	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
INH																															
RIF																															
PZA																															
EMB																															

INH = Isoniazid

RIF = Rifampin

PZA = Pyrazinamide

EMB = Ethambutol

B6 = Pyridoxine


Codes: D=DOT S=Self Administered SU=Set-Up F=Failed Dose (In Red) H=Held Dose DC=Discontinued X=Special Circumstance

HCW Signature: _____ Initials: _____ Patient Signature: _____ Initials: _____

(If given by DOT the Health Care Worker and Patient should initial form each day medication is given/ingested)

Completed doses taken this month: _____ daily _____ 2x/wk _____ 3x/wk Completed doses taken to date: _____ dily _____ 2x/wk _____ 3x/wk

**Missouri Department of Health and Senior Services
Tuberculosis Case Management Manual**

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Case Management: Monthly Patient Monitoring

POLICY: All patients receiving medications for tuberculosis will receive at a minimum, a monthly review by the Public Health Nurse.


PURPOSE: To evaluate the response to therapy and to identify adherence problems.

PROCEDURE:


1. Schedule a visit (clinic or home) with the patient. This should be done at least once per month.
2. Monitor/document for medication toxicity utilizing the TBC-1 form. Notify the physician if signs or symptoms of toxicity are noted.
3. Assess patient for clinical response to the prescribe regimen. Symptoms should improve within a few days to a few weeks.
 - Decrease in frequency of cough
 - Less sputum production
 - Increased appetite
 - Weight gain
 - Reduction in fever
 - Decreased night sweats

If the patient is not showing the expected clinical response, notify the health care provider promptly.

4. Draw routine blood for liver function studies if ordered by the physician. If client is exhibiting signs/symptoms of hepatotoxicity, liver function tests should also be drawn.
5. If client has elevated liver enzymes or sign/symptoms of hepatotoxicity contact the health care provider promptly. If the health care provider is unavailable, have the patient hold medications until further notice (no more than 2-3 days)
6. Collect sputum specimens weekly until client has 3 consecutive negative smears.
 - Airborne isolation may be discontinued after 3 consecutive negative sputum SMEARS.
 - Progressive reduction in smear and culture count should occur if appropriate medications have been prescribed/ingested.

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7. Sputum specimens should continue to be collected on a weekly basis until the patient has 3 consecutive negative CULTURES.
 - If the client is culture positive after two months of therapy the health care provider should be notified. If the client has also shown cavitations on initial CXR the length of treatment should be extended to 9 months per CDC/ATS recommendations.
8. Assess for adherence to the prescribed medication regimen.
 - Pill counts – count number of pills left in each medication bottle and document
 - Ask patient how many times medications were forgotten or missed
 - If you believe the client is non-compliant try and determine reason. Attempt to correct for non-adherence through using incentives/enablers. See section 4.9.
9. Provide patient education: Education should be provided in the patient's primary language and at an educational level appropriate for the patient. To include at least the following:
 - a. Tuberculosis disease process
 - b. Expected outcomes of treatment
 - Stress the importance of taking all medications exactly as prescribed. Taking only part of the medication or missing doses may result in drug resistance.
 - c. Benefits/adverse outcomes of drug regimens
 - d. Discussion of infectiousness and infection control.
 - e. Methods of supervision i.e. DOT
10. FAX/mail a copy of the Tuberculosis Drug Monitoring Record (TBC-1) to the designated state TB nurse each month.
11. CDC's Self Study Module on Tuberculosis, Module 9: Patient Adherence is an excellent resource on patient adherence.
<http://www.phppo.cdc.gov/PHTN/tbmodules/modules6-9/m9/9-index.htm>

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Case Management: Directly Observed Therapy

POLICY: Directly observed therapy (DOT) is the standard of care for all persons being treated for tuberculosis disease.

PURPOSE: To maximize completion of therapy, DOT is the preferred initial strategy. DOT coupled with individualized case management leads to the best treatment results.


PROCEDURE: Direct observation of therapy (DOT) involves providing the antituberculosis medications directly to the patient and watching as he/she swallows the medications.

I. Priority situations for the use of DOT:

- All children and adolescents
- Pulmonary TB with positive sputum smears
- Treatment failure
- Drug resistance
- Relapse
- HIV infection
- Previous treatment for TB or LTBI
- Current or prior substance abuse
- Memory impairment
- Psychiatric illnesses
- Previous non-adherence to therapy
- All Others

II. Initiating DOT


- DOT can be provided daily or intermittently in the office, clinic or in the “field” i.e. patient’s home, place of employment, school, street corner, bar, or any other site that is mutually agreeable.
- DOT should be used for all patients residing in institutional settings such as hospitals, nursing homes and correctional facilities. Even in such supervised settings careful attention must be paid to ensuring that ingestion of the medication is, in fact observed
- Intermittent medication regimens (bi-weekly and thrice weekly) **MUST** have all doses administered under DOT because of the potentially serious consequences of missed doses.
- If the client misses a scheduled appointment for DOT – the DOT provider must make immediate contact with the patient to schedule the next dose of medication. This can include calling the client or making a “field” visit.

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- All patients should continue to be monitored for signs and symptoms of treatment failure, and possible medication side effects. DOT is only one aspect of the patient treatment program.

III. Documentation of DOT

- A medication record should be kept on each patient. At completion of therapy document the number of DOT doses received.

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Case Management: Procedures for Observation of Directly Observed Therapy (DOT)

POLICY: All individuals administering DOT will follow the procedure listed below.


PURPOSE: To assure that all TB medications are taken as prescribed.

PROCEDURE: The public health nurse, the observer, and the patient will set a mutually agreed upon schedule and site for observing the actual ingestion of the medication(s).

- The observer may be a responsible person other than the patient or one who is subservient to the patient. Examples include: school or employee health nurses, work supervisors, clergy, or other responsible person who do not have strong emotional ties with the patient. If the case is a child the observer cannot be the child's parent or family member.

The following steps should occur at each DOT encounter:


1. Check for medication side effects.
 - The **observer** and the **patient** must be instructed by the public health nurse and have written materials regarding the potential adverse reaction(s) to the medication(s) that the patient is taking. Each time the observer and the patient meet for medication(s), the observer must check for any signs or symptoms of adverse reactions.
2. Verify the medication.
 - Each time DOT is delivered, the observer should verify that the right medications are delivered to the right patient in the right amount. If this cannot be confirmed, do not give the medication to the patient. The community health nurse should be notified.
3. Watch the patient take the medications.
 - The observer must actually see the patient swallow the medication(s). It is recommended that the observer remain with the patient for approximately five (5) minutes after the medication has been ingested, to assure that there is no regurgitation of the medication(s).
4. Document the visit.
 - The observer and patient must date and sign/initial for each dose of medication ingested. See medication administration record. This documentation then becomes part of the patient's medical record.
5. The observer must demonstrate understanding of patient confidentiality laws and observe them at all times.
 - Confidentiality statement signed by the observer should be kept on file with the local agency.

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6. If the patient misses even one (1) appointment to take the medication(s), the observer **MUST** notify the community health nurse immediately. The nurse then **MUST** immediately try to locate the patient and reinstitute DOT.

7. For additional information concerning DOT
CDC's Self Study Module on Tuberculosis, Module 9: Patient Adherence is an excellent resource on patient adherence.
<http://www.phppo.cdc.gov/PHTN/tbmodules/modules6-9/m6/6-index.htm>

8. Sample agreements to utilize for DOT are located in the appendix.

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Directly Observed Therapy (DOT) Financial Assistance

POLICY: To provide additional funding to Local Public Health Agencies (LPHA) to assist with providing Directly Observed Therapy (DOT) for TB disease patients and or high-risk LTBI patients. Funds are limited and subject to approval.

PURPOSE: To promote the use of DOT for TB disease patients and high-risk LTBI patients.

PROCEDURE:

1. Notify your state TB nurse that the LPHA is interested in participating in the DOT Financial Assistance program.
2. This program is only available to LPHAs that currently do not have a TB contract with Missouri Department of Health and Senior Services.
3. The LPHA can have up to (4) clients in the program for a maximum of \$700 dollars per client for successful completion of DOT.
4. The client would have to receive at least 80% of TB medications by DOT, per CDC 2003 Treatment Guidelines, to be considered “successful”. The CDC treatment guidelines indicate that daily therapy can be 5/days per week.
5. The program would have a fixed price billing as follows:
 - a. \$142 for the first two months (60 days)
 - The first two months of therapy usually require more intense nursing time
 - b. \$104 for the last four months
 - c. \$700 per client would be the maximum amount allowed
6. Billing frequency is negotiable; the entire amount could be billed at the end of therapy or a monthly invoice can be completed.
7. During the billing period the client would have had to receive at least 80% of their TB medications by DOT
8. Please see billing template in section 4.7.3 to bill for services rendered.
9. Documentation of the DOT visit would be recorded on the Medication Record (MR). The patient and the nurse would each sign the record and then initial each date the medication was given/received.
10. The individual observing the DOT would have to adhere to all Department of Health and Senior Services policies regarding DOT. Please refer to section 4.0 in the policy manual, subsection DOT.


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DOT Financial Assistance Billing Template

1. The LPHA should use the following template when billing for DOT financial assistance from the DHSS. Billing can be completed either on a monthly basis or at the end of treatment. The billing cycle can be any 30-day period.
2. Documentation of the DOT visit will be recorded on the Medication Record (MR). The patient and nurse will each sign the record and then initial each date the medications was given/received. Leave patient name on the MR form.
3. The MR and billing form shall be sent to Jefferson City for processing.
4. Put the sample paragraph an agency letterhead.
5. Sample paragraph:

The TB disease patient (do not use patient name on this form) residing in _____(county) received at least 80% of their TB medications by DOT as validated by the attached medication record (MR).

Signature of County Staff or Signature of LPHA

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Case Management: Self-Administered Therapy (SAT)

POLICY: DOT is the preferred standard of care for all TB patients. However, in some cases Self-Administered Therapy (SAT) will be necessary.


PURPOSE: To maximize completion of TB therapy for each patient through a patient centered case management plan. Each patient's management plan should be individualized to incorporate measures that facilitate adherence to the drug regimen.

PROCEDURE:

1. **Please see the DOT policy for patients that DO NOT qualify for SAT.**
2. Assessment of the patient who is self-administering TB medications should include:
 - a. Self-monitoring form – The TB Medication record (see appendix) should be used for the patient to record medications when they are taken each day.
 - This record can serve as a reminder for the patient and thus improve adherence.
 - b. The patient should return the TB medication record to the LPHA each month at the regular case management appointment.
 - c. Unlike DOT, self-reporting cannot be considered a true indicator of medication adherence and is a less reliable assessment tool.
3. Behavioral measures are frequently used to assess adherence. The most commonly used methods to assess TB treatment are:
 - a. Pill counts
 - b. Observation of patient behavior
 - c. Record keeping of clinical appointments
4. Clinical Outcome may be measured by:
 - a. Symptom improvement such as weight gain, lessening of cough, increased appetite and/or increased energy
 - b. Bacteriology change from smear and/or culture positive to negative
 - c. CXR improvement
5. Fixed-dose drug therapies are available for SAT patients from the contract pharmacy.
 - a. Fixed-dose therapy is recommended by the Centers for Disease Control and Prevention to promote patient compliance.
 - b. These drugs include:
 - Rifater, which combines pyrazinamide, Isoniazid, Rifampin; Rifamate, which combines Isoniazid and Rifampin.
 - Rifamate, which combines Isoniazid and Rifampin.

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6. Risk of non-adherence increases with the duration of treatment. Once patients experience symptom improvement they may stop taking TB medications.
7. If patient non-compliance becomes an issue, DOT should be instituted.
8. For non-compliant patients court ordered treatment can be initiated. See Chapter 9: Court Commitment of TB patients.

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Case Management: Tuberculosis Enablers and Incentive Program

POLICY: To facilitate successful treatment for tuberculosis.

PURPOSE: To improve compliance with therapy, through the use of incentives/enablers for those patients with tuberculosis disease or infection. This is a statewide program to provide a financial resource to local public health agencies for reimbursement of approved requests for the expenditure of funds to provide incentives for tuberculosis patients.

- A. Incentives are small rewards given to patients to encourage them to either take their own medicines or keep their clinic or field DOT appointments.

Examples of Incentives


- Food vouchers for snacks or meals
 - Groceries
 - Restaurant coupons
 - Clothing or personal products (i.e. soap, toothpaste)
 - Books
 - Retail store gift certificate (can NOT be redeemed for alcohol, cigarettes or ammunition)
- B. Enablers are those things that make it possible or easier for the patients to receive treatment by overcoming barriers such as transportation difficulties.

Examples of Enablers


- Transportation vouchers – cab fare
- Child Care – so patient can attend a doctors appointment
- Clinic hours and locations
- Who speak the languages of the populations served – Provider service
- Gas vouchers
- Health care supplies

PROCEDURE:

1. When a candidate is identified who could benefit from the use of incentives/enablers, request for incentives should be made through the state TB nurse, to the Disease Investigation Unit.
2. An official request for incentive funds should be made on the local health agencies' letterhead. The following information should be included:

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- Patient name
 - What Incentive funds will be used for
 - TB disease or LTBI
 - Requested item and cost
 - Agency and nurse making the request
 - Any additional information as needed
 - Date of service
3. Upon approval of the request by the TB Program Manager or their designee, the Section for Communicable Disease Prevention will prepare a mini initiative to guarantee payment to the requesting agency for the specific items listed in the mini initiative during the specific time period. The requestor should note that these funds may not be expended prior to receiving the signed mini initiative guarantying reimbursement of funds.
 4. After expenditures are incurred, reimbursement request(s) shall be submitted in the form of an invoice, and supporting documentation, on the local public health agencies letterhead to the Missouri Department of Health and Senior Services, Section for Communicable Disease Prevention, Fiscal and Operations Unit, PO Box 570, 930 Wildwood Drive, Jefferson City, MO 65102-0570. The total of all invoices may not exceed the authorized amount in the mini initiative. All invoices must be received by the date indicated in the mini initiative in order to be considered for payment.
 5. Annual incentives in excess of \$500.00 for an individual patient will generally not be approved. Exceptions can be made in extenuating circumstances with the approval of the TB Program Manager and/or the Chief, Section for Communicable Disease Prevention.
 6. First priority is given to purchasing incentives/enablers for patients with disease. Second priority is given to patients with infection who are high risk for breaking down with disease or who are a close contact to a tuberculosis case.
 7. Incentives should be tailored to the patient's individual special needs and interests. Incentives are to be utilized to motivate the patient to complete his or her tuberculosis treatment.

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**Case Management:
Admission and Discharge
Missouri Rehabilitation Center (MRC)**

POLICY: Approval is needed by the Missouri Rehabilitation Center to admit a patient to their facility.

PURPOSE:


1. To assist MRC in effectively managing their resources, and to assure that appropriate follow-up is provided for tuberculosis patients who have been hospitalized at MRC.
2. To assure that a TB disease patients who meets the criteria for involuntary commitment, (under RSMo 199.127-199.227), must legally remain at MRC until cured.

BACKGROUND:

- Missouri Rehabilitation Center is a service of the University of Missouri.
- Missouri Rehabilitation Center's more than eighty (80) years of tuberculosis care experience enables it to provide specialized treatment, acute care nursing, nutritional support, therapy and education for the tuberculosis patient.
- An Outpatient Clinic is available to see TB patients by appointment
 - o Services available include chest x-rays to aid in diagnosing pulmonary tuberculosis and for monitoring response to treatment
 - o Tuberculin skin testing, medical evaluation and chest x-rays as needed for contacts

PROCEDURES:


1. Hospital/private physician should contact the local public health agency and inform the staff that he/she has a patient who needs admission to the Missouri Rehabilitation Center (MRC).
2. The LPHA staff should notify the State TB Nurse that he/she has a patient being referred for admission to MRC.
3. The local public health agency should inform MRC that he/she has a patient being referred for admission.
4. A clinical summary should be sent to MRC, which will include one or more of the following categories for referral:
 - Proven noncompliance with treatment and/or keeping appointments for follow-up and when the client is felt to be a threat to themselves and/or to the community*
 - Failure to improve with outpatient treatment

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- Complicated course of TB, such as
 - o Continued progression of disease despite appropriate therapy
 - o Multi-drug resistant TB
 - o Drug regimens that necessitate inpatient or parental administration that cannot be accomplished on an outpatient basis
- Substance abuse problems where compliance may be an issue*
- Social conditions that do not allow traditional outpatient therapy, i.e. homelessness, lack of funds, or lack of social support. *

*MRC may require that the local public health agency obtain a court order for ensuring that the patient remains at MRC until cured unless the patient can be pre-certified for insurance coverage.


5. To refer a patient to the tuberculosis unit at the Missouri Rehabilitation Center (MRC), (weekdays only) call the admissions coordinator (417) 466-3711. Be prepared with the following information:
 - Name,
 - Date of birth,
 - Social Security number,
 - Next of kin and their address and telephone number,
 - Payment source (if the patient is already hospitalized or in another institution, the cover sheet will contain most of the personal information needed, and may be Faxed to MRC.)
6. Required information to be sent to MRC for admission includes:
 - Copies of the most recent smear/culture laboratory report indicating that the client has a positive AFB or *M. tuberculosis*, and drug susceptibility studies if available.
 - o If all specimens are at the State Tuberculosis Laboratory this is not needed.
 - Copies of the most recent chest x-ray films and reports.
 - Additional information that may be required by the MRC staff. The name, address and telephone number of the private health care provider.
 - A current history and physical, current medical and nursing progress notes,
 - A complete list, including dosages and timing, of any medications (anti tuberculosis and others) the patient is currently taking.
7. The patient or facility of origin must provide transportation.
 - A family member may bring the patient by car.
 - Transportation by ambulance may be necessary.
 - **Under no circumstances is a diagnosed or suspected infectious pulmonary tuberculosis patient to travel on public transportation.**

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- If there are problems with arranging for transportation to MRC, consult with your State TB nurse.
8. If admission is **urgent** on a weekend or holiday, call the MRC and ask for the doctor on call. Have all the above information at hand.
 9. Once the patient is admitted, his or her case will be discussed every two weeks at in-patient care conferences.
 - Notes from these conferences may be faxed upon request of patient's local public health agency.
 - LPHAs will have the option to join MRC staff in biweekly patient meetings via conference call. Minutes of these meetings will be provided for the LPHA.
 10. MRC will notify the patient's LPHA in the county of origin prior to discharge.
 - Approval for discharge will be secured from the LPHA for patients that have not completed treatment.
 - Two weeks of medications will be provided to ensure continuity of treatment.
 - All patients will be discharged on directly observed therapy. The patient will be included in all discharge planning.
 - A copy of the discharge summary on all tuberculosis patients who have been hospitalized at MRC is sent by mail/fax to the appropriate local health department and to the state TB nurse.

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Case Management: HIV/TB Case Supervision

POLICY: To provide HIV counseling and testing to all patients presenting with suspect/known TB disease.

PURPOSE: To ensure appropriate care and services for persons co-infected with HIV and TB disease.

PROCEDURE: Upon notification of a suspect/known TB case, the TB control staff person at the local health department will:

1. Offer HIV counseling and testing, regardless of client age.
 - a) Treating a patient with HIV/TB co-infection can alter the course of treatment. It is very important for the physician to know the patient's HIV status.
2. Contact the HIV care coordinator once official notification of a positive HIV test is obtained.
3. Coordinate the initial visit so both a TB staff person and an HIV care coordinator are both present with the patient at the same time.
4. Ensure that HIV care coordinators demonstrate understanding of the TB disease process and appropriate isolation precautions.
5. Report all newly diagnosed HIV cases to the Missouri Department of Health on a CD-1 form (see appendix) within 3 days of first knowledge.
6. Refer to Subsection 1.0 of this section for other care guidelines.
7. Refer to MMWR "Treatment of Tuberculosis", June 20, 2003, section 8.0, page 50, for additional information on the treatment of TB/HIV patients.
<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5211a1.htm>
8. Updates to HIV/TB treatment guidelines are made frequently. Please check the CDC website www.cdc.gov/nchstp/tb/ for the most recent information on the treatment of HIV/TB co-infection.

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Case Management: Interjurisdictional Transfer

POLICY: To provide prompt notification to the state, city, or county when a client relocates.

PURPOSE: To ensure continuity of care when TB patients relocate.

PROCEDURE:

1. Moving within the state:

- a. Notify by phone the receiving jurisdiction as soon as possible when a client is relocating.
 - The receiving county should immediately contact the patient. If the receiving county cannot locate the patient – contact the original county and see if additional information is available.
- b. Provide a copy of the patient's record to the receiving health department.
- c. A signed release is NOT needed to transfer patient information to another health department.
- d. Notify the state TB nurse of the patient relocation.

2. Moving outside the state:

- a. The LPHA must notify the State's Interjurisdictional Referral Coordinator when a client moves outside the state of Missouri. An Interstate Reciprocal Notification of Disease form will be forwarded to the state to which the patient has moved.

3. Moving to Missouri from Out of state:


- a. When a patient moves into Missouri, the state receives the Interstate Reciprocal Notification of Disease form from the originating state. The information will be passed to the LPHA where the patient is moving.

4. Patients moving to Mexico:

- a. Contact the State Interjurisdictional Referral Coordinator if a client is relocating to Mexico.
- b. CURE-TB is an organization that provides linkage between Mexico and the United States health departments. It helps improve continuity of care for TB patients traveling between the US and Mexico.
- c. For additional information the Cure-TB Program the web site is:
www.2sdcountry.ca.gov/hhsa/servicedetails.asp

5. Supervision in the county other than residence:

- a. If a patient receives a service in a local health unit other than his county of residence, notify your State TB nurse.

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Interruption of Therapy – TB Disease

POLICY: To provide the client with the recommended treatment for TB disease when interruptions in therapy occur.


PURPOSE: To provide recommendations on how to assure that the client receives the recommended amount of medications for TB disease.

BACKGROUND:

- Interruptions of therapy can occur for many reasons: intolerance of medication, increase in liver enzymes, and non-compliance of the patient ingesting the medication.
- Completion of therapy is based on the total number of doses administered – not on duration of therapy alone.
- Treatment is more important in the initial phase of therapy – when there is a high bacillary population and the chance of developing drug resistance is greater.
- The earlier the break in therapy and the longer its duration, the more serious the effect and the greater need to restart the treatment from the beginning.

PROCEDURE: When break in therapy occurs during the:

1. Initial Phase: First two (2) months
 - Lapse > 14 days in duration, treatment should be restarted from the beginning
 - Lapse < 14 days the treatment can be continued
 - In either case the total number of target doses to be given in the initial phase should be given.
2. Continuation Phase:
 - If the patient has received >80% of the planned total continuation phase doses given by DOT, further treatment may not be necessary if:
 - Sputum was initially smear negative
 - If sputum smear positive continued treatment is needed.
 - If patient received >80% of the planned total doses:
 - Lapse is > 3 months duration – **TREATMENT SHOULD BE RESTARTED FROM THE BEGINNING.**
 - Lapse is < 3 months in duration, treatment should be continued to complete a full course
3. When the patient returns to treatment in either phase, sputum cultures should be obtained and repeat drug susceptibility testing performed.
 - **If positive cultures – treatment regimen must be restarted.**

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- If negative cultures – the patient could be treated as culture-negative TB and given an additional 4 months of combination therapy.
4. DOT should be used to ensure completion of therapy. Regardless of timing and duration of therapy interruption.
 5. If already on DOT additional measures will be necessary to ensure completion of therapy. This could include incentives or involuntary commitment. (See appendix 5 – Involuntary commitment).
 6. Please see the current 2003 CDC recommendations for “Treatment of Tuberculosis” for further information.
<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5211a1.htm>



ANNUAL STATEMENT FOR TUBERCULIN REACTORS

NAME: _____

DATE OF BIRTH: _____

SIGNS/SYMPTOMS SCREENING (Yes/No):

_____ Cough lasting longer than three (3) weeks
_____ Unexplained fever
_____ Night sweats
_____ Unexplained weight loss
_____ Coughing up blood
_____ Chest pain

IF NONE OF THESE SYMPTOMS ARE PRESENT, A CHEST X-RAY IS NOT NECESSARY.

Nurse/Physician

Date

[] I am tuberculin positive. I have had the recommended course of treatment for **tuberculosis infection** (LTBI).

[] I am tuberculin positive. I have had the recommended course of treatment for **tuberculosis disease**.

[] I am tuberculin positive. I have had one negative chest x-ray since becoming tuberculin skin test positive.

If I develop any of the above symptoms, I agree to seek immediate medical attention.

Patient

Date